

REMARKS

The Applicants appreciate the Examiner's thorough examination of the subject application. Applicants request reconsideration of the subject application based on the instant amendments and following remarks.

Status of the Claims

Claims 1 and 10 have been amended without prejudice or disclaimer. Support for the amendments can be found throughout the specification, e.g., at pages 18-19.

Claims 1 - 10 are pending in the application. Claims 8 and 9 stand withdrawn from consideration as being directed to a non-elected invention.

Claim 1, as presently pending, is directed to an *injection molded* resin container comprising a container body and a lid for closing the container body. As further provided by amended claim 1, the container body is produced by *injecting molten amorphous thermoplastic resin* into a cavity of a mold assembly having a cavity for forming a recessed flat portion and a peripheral rise portion of the container.

Interview Summary

The Examiner's courtesy in permitting a personal interview (the "Interview") with Mr. Kayano and Applicants' undersigned representative on May 15, 2007, is gratefully acknowledged. During the Interview, the claims and rejections of record were discussed. It was agreed that the rejection under 35 U.S.C. §112, first paragraph would be withdrawn. With respect to the remaining rejection, the Examiner agreed to consider additional arguments and evidence, but no final agreement was reached.

Rejection under 35 U.S.C. §112, first paragraph

In the Office Action, claims 1, 4 and 5 were again rejected under 35 U.S.C. §112, first paragraph, as allegedly failing to comply with the written description requirement.

As noted above, during the Interview, the Examiner indicated that rejection under 35 U.S.C. §112, first paragraph, would be withdrawn. Applicants submit that withdrawal of the rejection is proper and such action is requested.

Rejection under 35 U.S.C. §103(a), first paragraph

Claims 1-7 and 10 were rejected under 35 U.S.C. 103(a) as being allegedly unpatentable over Bird in view of Satake and in further view of Sylvester. The rejection is traversed.

The Office Action states (at page 4 of the Office Action) that

Bird teaches that the container body and recessed flat portion (bottom wall 116) are formed by injection molding since Bird teaches that the web 200 of thermoplastic polymer is supplied as a preformed sheet by continuous injection molding to a mold or die 204 that thermoforms the web. Since the pockets 112 are formed from web 200, and since bottom wall 116 is the bottom wall of each pocket 112, the container body and recessed flat portion of Bird are formed by injection molding.

Office Action at page 4 (internal citations omitted). Applicants cannot agree with these statements.

As discussed in previous responses, one of ordinary skill would appreciate that the "continuous injection molding" described in Bird refers only to the formation of a preformed roll or web of material, not to the method of preparing a resin container or other article from that preformed roll or web.

As the Examiner appears to concede, Bird does not teach or suggest forming such injection molded container of the present invention, by *injecting molten amorphous thermoplastic resin into a cavity of a mold assembly*.

Thus, Bird does not teach *injection molded* resin containers having a container body composed of an injection molded amorphous thermoplastic resin or a container body having a recessed flat portion defined by a peripheral rise portion wherein the

recessed flat portion is formed by injection-molding, as recited by pending claim 1 (and the remaining claims which depend therefrom). Bird does not teach or suggest forming an injection molded container by injecting molten amorphous thermoplastic resin into a cavity of a mold assembly, as also recited in claim 1.

In the Office Action, the Examiner points to the Bird patent, at Col. 12, lines 44-58, as showing that a molded product is produced by injection molding. However, in that paragraph, the Bird patent states that “a web 200 of a flexible thermoplastic polymer is supplied . . . by continuous injection molding to a mold or die 204 (which may be a pair of matched male and female dies) that thermoform the web.” Applicants respectfully contend that this process would not be called “injection molding” by one of ordinary skill in the art.

As discussed in the Second Declaration of Yoshihiro Kayano Under 37 CFR 1.132 (hereinafter “Second Declaration”), a copy of which is attached hereto, injection molding is a process in which a material is heat-melted, and the molten material is injected and filled into a cavity or mold which has been previously assembled and closed. The material is solidified or cured and then removed from the mold to obtain a molded product. Second Declaration at paragraph 6. See also the enclosed excerpts (with partial English translation) of the “PLASTIC WORDING DICTIONARY”, Third edition, Editor: Susumu NAGAI, Published by Eiichi ASAYAMA of Plastic Age Co., Ltd. (Third Edition: September 10, 1989) (describing “injection molding”).

In contrast to injection molding, thermoforming is a process in which a thermoplastic resin sheet is heated and softened; the sheet is formed while in the softened condition to give a shape, and then cooled to obtain a product. One kind of thermoforming is known as “matched mold forming,” in which the heated, softened thermoplastic resin sheet is pressed between a male mold and a matching female mold to form a product. Second Declaration at paragraph 7. See also the enclosed excerpt of URL=<http://www.yoshinokogyosho.co.jp/P8.html> with English translation (e.g., “Explanation of various molding methods”).

As discussed in the Second Declaration, injection molding and thermoforming are different processes, and products made by injection molding differ from products made by thermoforming. Second Declaration at paragraph 8(a)-8(c). For example, as explained in the Second Declaration, an injection molded product will often have a "gate mark," whereas a thermoformed product, which is not made by injecting molten material through a gate, will not have gate marks. Also, a thermoformed product can have a "trimming mark" where the article was cut away from the remaining sheet material, whereas an injection molded article will not have trimming marks. Even further, the thickness of a container wall formed by thermoforming is relatively non-uniform. See, e.g., ANTEC1999, Preprint ("Optimization of Thermoforming with Process Modeling" by R. DiRaddo et al.) attached herewith. In contrast, an injection molded article will have a thickness determined by the dimensions of the mold, and will generally be more uniform in thickness.

The cited paragraph of Bird describes production of a carrier tape by thermoforming a web, and specifically describes "matched mold forming." As Bird states (at Col. 12, line 54), "[m]old 204 thermoforms the pockets" of the carrier tape (emphasis added). As provided in the Second Declaration, even if the web 200 of thermoplastic resin is formed by continuous injection molding, one of skill in the art would not refer to the finished product of Bird (the carrier tape) as being made by injection molding. Second Declaration at paragraph 9.

Thus, Applicants respectfully contend that the portion of the Bird patent cited by the Examiner does not describe injection molding of an article according to the present claims. Moreover, Applicants respectfully contend that one of ordinary skill in the art can distinguish an injection molded article from a thermoformed article.

Neither Sylvester nor Satake overcome the limitations of the Bird reference so as to "bridge the gap" between the teachings of Bird and the claimed invention. More particularly, neither Sylvester nor Satake teach or suggest an injection molded resin

container comprising a container body having a recessed flat portion defined by a peripheral rise portion wherein the recessed flat portion is formed by injection-molding.

The Examiner has previously cited Satake as allegedly disclosing "an injection molded product for use as various electronic parts . . . that may be formed from an amorphous thermoplastic resin." Office Action dated November 2, 2005, at page 5. However, as Applicants understand the Satake reference, Satake merely discloses a particular resin and states generally that the resin can be formed into various products.

There is absolutely no teaching or suggestion in Satake that could bridge the gap between the deficient teachings of Bird and the presently-claimed invention. In particular, Satake does not teach or suggest an injection molded resin container, having a container body and a lid for closing the container body, can be produced by injecting molten amorphous thermoplastic resin into a cavity of a mold assembly having a cavity for forming a recessed flat portion and a peripheral rise portion of the container, as required by pending claim 1. Therefore, there would be no motivation to combine the references as suggested by the Examiner.

Similarly, Sylvester contains no teaching whatsoever of an injection molded resin container, having a container body and a lid for closing the container body, produced by injecting molten amorphous thermoplastic resin into a cavity of a mold assembly having a cavity for forming a recessed flat portion and a peripheral rise portion of the container, as required by pending claim 1. Sylvester does not discuss injection molded resin containers at all, much less resin containers as presently claimed. Therefore, Sylvester also cannot bridge the gap between the deficient teachings of Bird and the presently-claimed invention.

Applicants submit that simply picking and choosing the elements of the claimed invention from among many different options in the art, absent a reason to combine the elements, is hindsight and does not suffice to sustain a rejection under 35 USC § 103(a). Applicants respectfully submit that the claimed invention is not taught or suggested by any of the cited references, whether taken alone or in combination.

For at least the reasons discussed *supra*, one of ordinary skill in the art would not have been motivated to prepare the resin containers provided by the instantly claimed invention. Thus, withdrawal of the §103(a) rejection and reconsideration of the claims is requested.

Early and favorable consideration of the application and claims as amended is earnestly solicited.

Conclusion

Although no extension of time is believed to be required, Applicants request any extension of time necessary. Although it is not believed that any fees are needed to consider this submission, the Examiner is hereby authorized to charge our deposit account no. 04-1105 should any fee be deemed necessary.

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Respectfully submitted,

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